

CSCP

## A NEW GET AWAY SPECIAL (GAS) PROJECT

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ABSTRACT

The Get Away Special (GAS) Program has instituted a new project called Complex Self Contained Payloads (CSCP) designed to support GAS type payloads that are beyond the scope of the GAS program. These payloads may be supported by GAS personnel and hardware and will fly as primary or secondary Shuttle payloads using the standard NASA Form 1628.

INTRODUCTION

The National Aeronautics and Space Administration's (NASA) Space Transportation System (STS) is built around a reusable vehicle called the Space Shuttle and is designed to provide routine access to space for a wide variety of payloads and users.

The Small Self Contained Payloads (SSCP) Get Away Special (GAS) Program was developed to provide certain types of payloads with a low cost way into space.

A review of the requirements of some GAS users has revealed that the very complex, classified or potentially hazardous payloads do not fit within the scope of the SSCP/GAS program. Further investigation exposed a definite need for a project that would support these payloads economically. It was then determined that GAS hardware and GAS personnel expertise would be an invaluable asset toward supporting these payloads.

The above considerations led to the decision to implement a new project within the scope of SSCP but apart from the GAS Program. This new project is called Complex Self Contained Payloads (CSCP).

## PURPOSE

The purpose of the CSCP Project is to provide a flight carrier system and technical support to the user community whose small self contained payloads are complex, classified or potentially hazardous. The nature of these payloads precludes their inclusion in the GAS program. All CSCP payloads would be manifested according to the current NASA primary or secondary payload policies.

## SSCP CLASSIFICATION

- A. GAS - Candidate payload requirements for the standard GAS payload (Reference: NASA 14CFR Part 1214, Space Transportation System: Use of Small Self Contained Payloads) include:
  - 1. The payload mission requirements are not Shuttle mission drivers.
  - 2. The payload utilizes the normal GAS accommodations including optional services such as opening lid and ejection system.
  - 3. The payload has no residual hazards.
  - 4. The payload is not classified.
  - 5. The payload can fly within the normal GAS queuing system.
- B. CSCP - A payload may be a candidate for CSCP if it cannot fly in the GAS program for any of the following reasons:
  - 1. The payload mission requirements may be Shuttle mission drivers.
  - 2. The payload requires more than normal GAS accommodations but is still self contained.
  - 3. The payload has residual hazards.
  - 4. The payload is classified.
  - 5. The payload cannot fly within the normal GAS queuing system.

### CSCP Determination

GAS payloads and potential GAS payloads that are reviewed and are determined to be beyond the scope of the GAS program may be recommended for inclusion in the CSCP Project. A payload may also be considered as a candidate for CSCP on the request of the Payload Organization.

### CSCP Requirements

Payloads that are identified for the CSCP project will have a Form 1628 (old Form 100) submitted to STS for approval. All payloads in the CSCP project may have use of GAS technical coordination, GAS carrier elements, GAS integration and preparation support as agreed upon by NASA Headquarters and the Goddard Space Flight Center. Specifics of the support will be detailed in a Support Requirement Plan (SRP) - an agreement between the customer and the CSCP. STS mission unique costs will be the responsibility of the payload organization. Each CSCP payload must maintain its self-contained concept and not require any services from the Shuttle other than mission timeline and safety considerations.

Each payload in the CSCP will require a separate STS Payload Integration Plan (PIP) and associated Annexes as well as a full phased safety review process. It is estimated that the CSCP Project will support two to four payloads each year based on the support requested.

### CSCP Costs

The costs of the standard and mission unique support for each of the CSCP will be done on a case-by-case basis.

### CSCP Participation

The CSCP Project proposes to provide the Basic Support Package (BSP) at a fixed cost. The BSP consists of:

- a. Technical coordination and equipment compatibility reviews.
- b. Payload carrier system.
- c. Integration support at the Kennedy Space Center (KSC).

The CSCP Project may offer additional support on a limited basis, but not limited to, the following areas:

- a. System safety support
- b. Flight operations support
- c. Unique flight and ground hardware
- d. STS integration documentation

All requests for additional support must be agreed to by CSCP management and included in the SRP.